

# INTERNATIONAL SEARCH REPORT

Application No  
PCT/GB2004/001851

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H03F1/30 H03F1/52 H03F1/34 H03K3/3565 H03K3/0233  
H03K3/037 H03K3/13 H03K3/2893

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H03F H03K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 297 642 A (BALDWIN GARY L ET AL) 27 October 1981 (1981-10-27)	1-6, 8
Y	column 2, line 66 - column 3, line 24; figure 1	7
Y	US 4 345 218 A (CONGDON JAMES S ET AL) 17 August 1982 (1982-08-17) column 3, lines 27-33; figure 2 column 5, lines 39-46	7, 14
X	EP 1 235 348 A (SIEMENS AG) 28 August 2002 (2002-08-28)	9-13, 15
Y	paragraphs '0048! - '0050!; figure 6	14
X	GB 2 305 318 A (THOMSON MULTIMEDIA SA) 2 April 1997 (1997-04-02) page 4, line 18 - page 5, line 3; figure 1	9-13, 15
	----- -/--	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

16 September 2004

Date of mailing of the international search report

06.10.2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Fedi, G

## INTERNATIONAL SEARCH REPORT

Application No  
PCT/GB2004/001851

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 298 843 A (NIXON JOHN M) 3 November 1981 (1981-11-03) column 6, line 60 - column 8, line 32; figure 3 -----	1-8
A	US 5 122 680 A (STAKELY BARRY L ET AL) 16 June 1992 (1992-06-16) column 2, line 35 - column 3, line 58; figure 1 -----	9-15

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/GB2004/001851

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

#### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8

a linear amplifier comprising an input terminal and an analogue switch, with a switch input connected to the input terminal and a switch output connected to the switch input to provide negative feedback.

---

2. claims: 9-15

a Schmitt trigger comprising an input terminal and an analogue switch, with a switch input connected to the input terminal and a switch output connected to the switch input to provide positive feedback.

---

**INTERNATIONAL SEARCH REPORT**  
information on patent family members

Application No  
**PCT/GB2004/001851**

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4297642	A	27-10-1981	NONE	
US 4345218	A	17-08-1982	NONE	
EP 1235348	A	28-08-2002	EP 1235348 A1	28-08-2002
			US 2002125942 A1	12-09-2002
GB 2305318	A	02-04-1997	NONE	
US 4298843	A	03-11-1981	NONE	
US 5122680	A	16-06-1992	JP 2558027 B2	27-11-1996
			JP 4290006 A	14-10-1992